

Date: Wednesday, 29/04/2009 3:02:04 PM  
 User: Julie Dawson

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : TIRE AND RIM ASSEMBLY
<b>Job Number</b> : 47607	
<b>Estimate Number</b> : 11156	
<b>P.O. Number</b> :	<b>Part Number</b> : D32339
<b>This Issue</b> : 29/04/2009 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3233
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : PURCHASED PARTS	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 45006	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 10/05/2009 <b>Qty:</b> 6 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JLD 09.04.29</u>	
<b>Comment</b> : Est A: 05.03.03 New issue KJ/JLM	
Est B: 08.11.28 QC6 moved to step 4 KJ Verified by: EC	
Est Rev:C 09-03-18 update QC6 per NCR09-015 DD verified by:JM	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	PG	PURCHASING
-----	----	------------

**Comment:** PURCHASINGIssue P/O: 8698

For D3233-9 Tire and Rim Assembly P/N: 8353T74

Possible Supplier: McMaster-Carr

Product Specification sheet is required

0209/04/30 (E)

2.0	8353T74	TIRE & RIM
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)  
 Tire & Rim Assembly

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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**Comment:** PACKAGING RESOURCE #1

Receive and Inspect for transit damage

Ensure Product Specification sheet is attached

09/05/09 (6)

4.0	QC6	DIMENSIONAL CHECK
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**Comment:** DIMENSIONAL CHECK

\*\*\*\*\* inflate the tires to 90PSI as per the drawing (or assembly dwg) to verify the valves and the rim etc. for  
 leaks upon receipt \*\*\*\*\*

02/05/09 (X6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Wednesday, 29/04/2009 3:02:04 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TIRE AND RIM ASSEMBLY

Job Number: 47607

Part Number: D32339

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: CARL

*Handwritten:* 09/05/05

6.0

QC21

FINAL INSPECTION/W/O RELEASE



*Handwritten:* 09/05/06

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*Handwritten:* MK  
09-05-06

*Handwritten:* (6x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

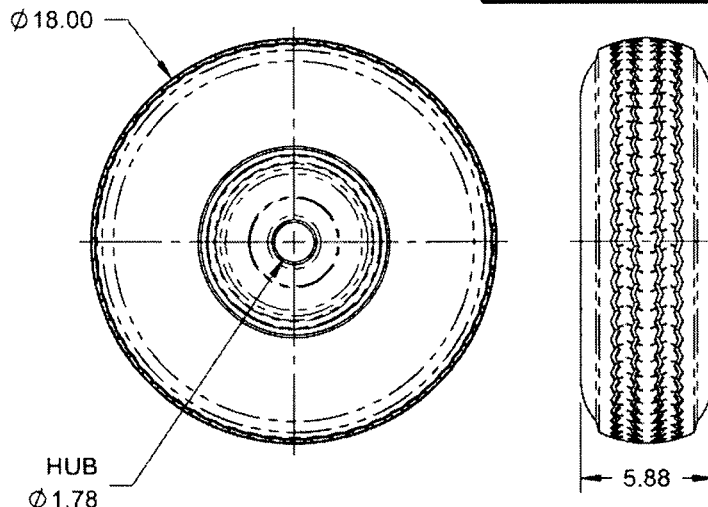
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

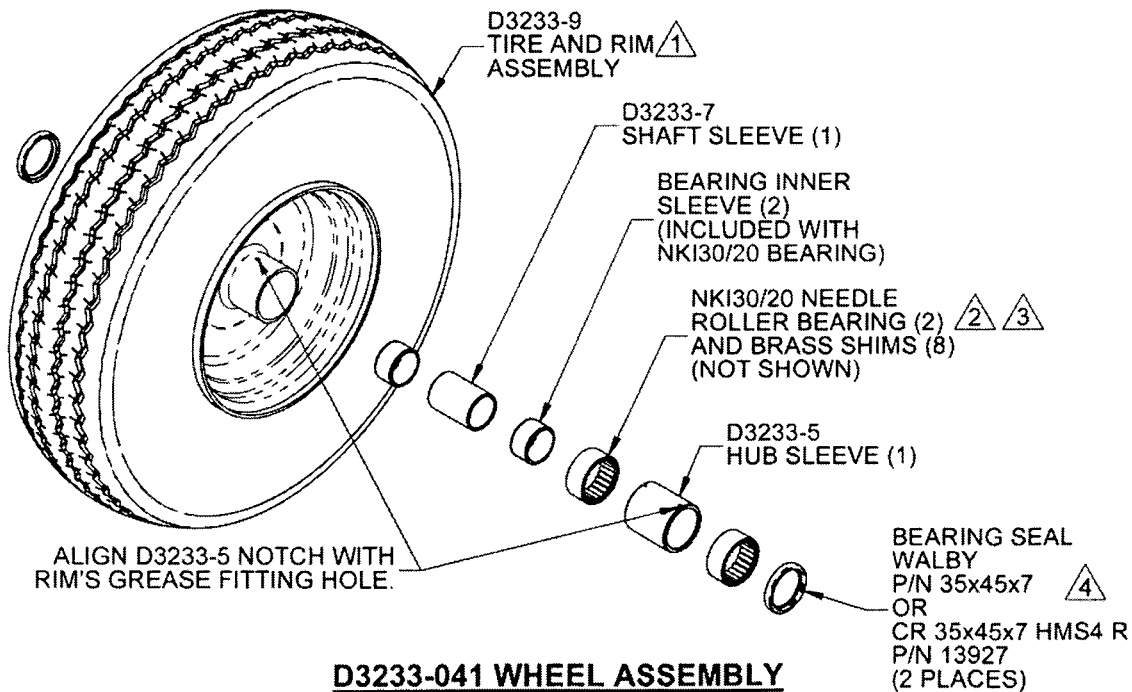
**DART**

DESIGN	DRAWN BY	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. <b>D3233</b>	REV. B SHEET 1 OF 3
DATE <b>05.03.08</b>	TITLE <b>WHEEL ASSEMBLY</b>		SCALE 1:1
A	05.02.18	NEW ISSUE	
B	05.03.08	ADDED BEARING SEALS	



WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0	910 LBS (RANGE C)	90 PSI*

\* MANUFACTURER'S RECOMMENDATIONS  
ARE 75 PSI FOR HIGH SPEED USE.



### D3233-041 WHEEL ASSEMBLY

#### NOTES:

- 1) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH  
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

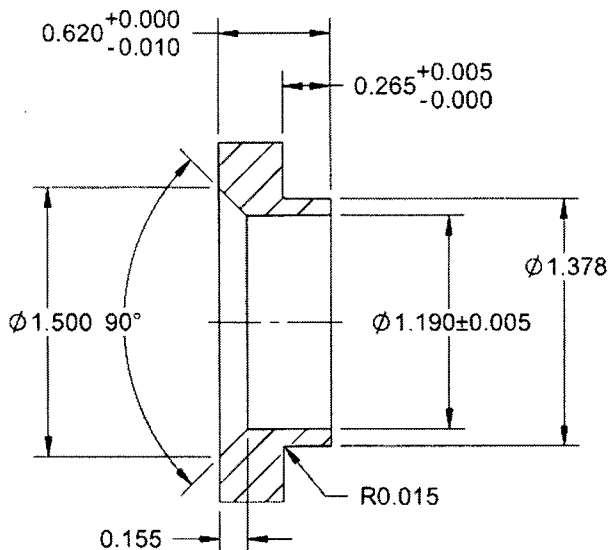
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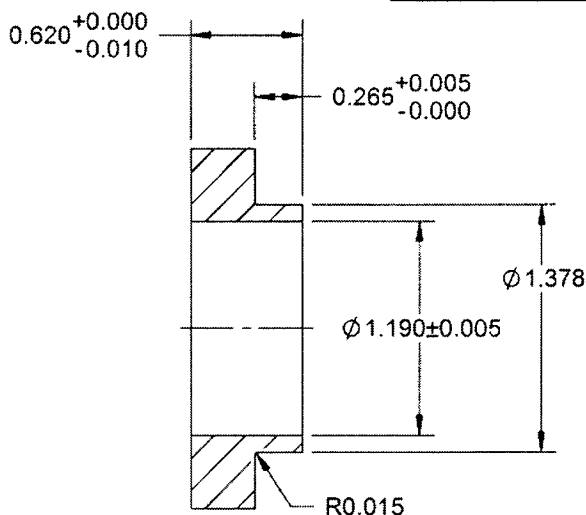
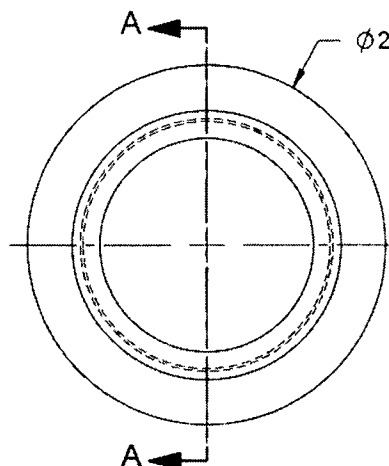


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DATE <b>05.03.08</b>		TITLE <b>WHEEL ASSEMBLY</b>	SCALE 1:1



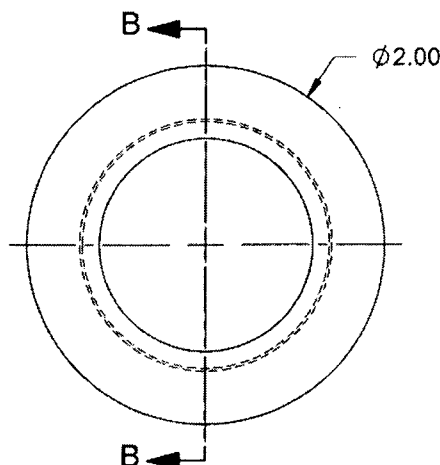
**SECTION A-A**

**D3233-1 INSIDE WASHER**



**SECTION B-B**

**D3233-3 OUTSIDE WASHER**



**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513, MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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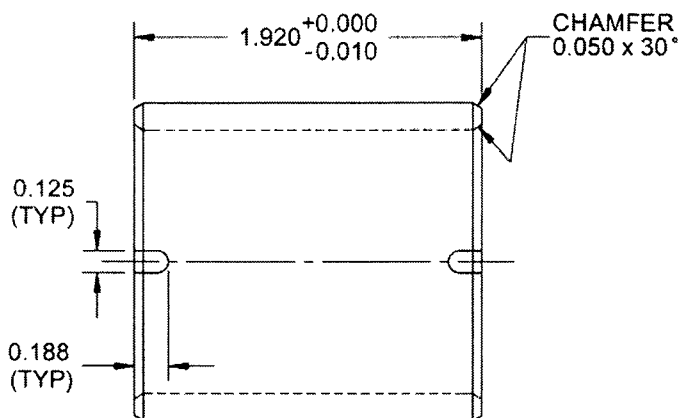
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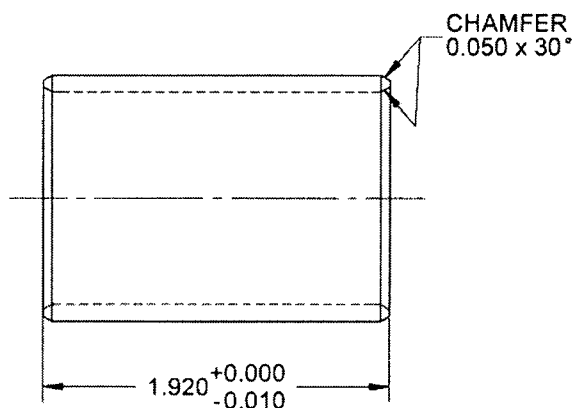
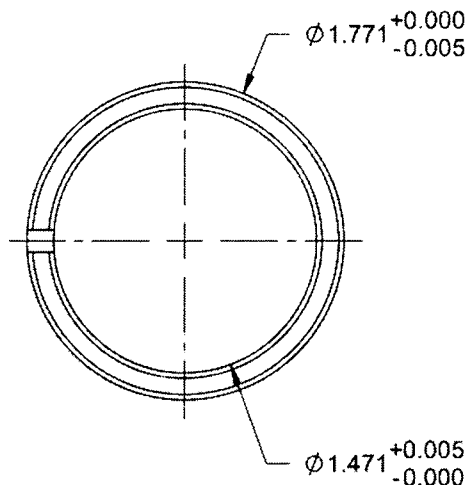
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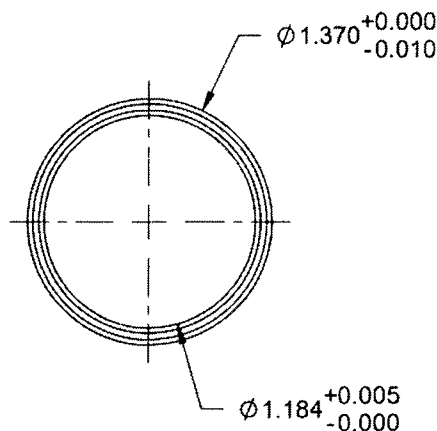
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DATE <b>05.03.08</b>		TITLE <b>WHEEL ASSEMBLY</b>	SCALE 1:1



**D3233-5 HUB SLEEVE**



**D3233-7 SHAFT SLEEVE**



**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00, MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

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Aurora OH 44202  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
**PO00008698**

McMaster-Carr Number  
**5744159-01**

Page 1 of 2

04/30/2009

Line	Description	Ordered	Shipped
3	<b>8509A12</b> Removable Drill Bushing for Thin Gauge Material, 30 (.1285") ID, 3/8" OD, 3/8"-24 Thread Size	80 Each	✓ 30
4	<b>8509A31</b> Lock Ring, 1/2" OD, for 8509a11-15, A41-43, Removable Drill Bushing for Thin Gauge Material	80 Each	✓ 80
5	<b>8491A107</b> Steel Press-Fit Drill Bushing/Liner, 0.1875" (3/16") ID, 5/16" OD, 1/2" Length	25 Each	✓ 25
2	<b>2986A46</b> Long-Length Short-Flute Twist Drill Bit, High-Speed-Steel, 1/16" Drill Size, 12" Overall Length, 7/8" L Flute	12 Each	✓ 12
1	<b>2986A12</b> Long-Length Short-Flute Twist Drill Bit, High-Speed-Steel, 1/16" Drill Size, 6" Overall Length, 7/8" L Flute	12 Each	✓ 12
6	<b>8353T74</b> Pneumatic Wheel with One-Piece Rim, 18" X 5.9", center Hub, 1-1/4" Axle, Roller Bearing, 1590#cap	6 Each	6
7	<b>4997T28</b> Pneumatic Wheel with Two-Piece Rim, 12.4" X 3.6", Center Hub, 1" Axle, Roller Bearing, 440#cap	12 Each	12

LNS **A7**

2 - 494 - 05	<b>24 - 34</b> A12	<b>30 EA</b>	3
2 - 495 - 02	<b>05 - 12</b> A31	<b>80 EA</b>	4
2 - 496 - 02	<b>06 - 39</b> A107	<b>25 EA</b>	5
2 - 504 - 03	<b>09 - 93</b> A46	<b>12 EA</b>	2
2 - 505 - 01	<b>07 - 07</b> A12	<b>12 EA</b>	1
8 - 79			6
8 - 97	02/05/05		7

Dart Aerospace Ltd

Assembly  
Area

**7**

Cycle

**39**

Shelf

**1**

Documents

**4**

**EXP**

194 lbs  
9 lines

FW1WBP22  
04/30/2009  
12:43/13:07  
538

